

Established 1877.

T. C. SNYDER & CO.,

MANUFACTURERS

IRON ROOFING,

SIDING AND CEILING,

Plain, Corrugated, Crimped and Beaded,

—MADE OF—

CHARCOAL IRON. SHEET STEEL AND CALAMINED IRON.

→**IRON ORE PAINT**←

ROOFING CEMENT,

Roofer's Felt, Builder's Waterproof Sheathing
Papers, Deafening Felt, &c.

IRON SHUTTERS, DOORS and GUTTERS.

Patent Calamined Iron,

In Bundles for Tinner's and Builder's Uses.

ROOFING NAILS FOR IRON AND TIN.

CANTON, OHIO.

AGENTS WANTED.

Form 1.—2-17-85-60m.

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THE H. W. SMITH STANDARD IRON ROOFING.

Has a larger sale than any other Iron Roof in the World.

CHEAP, SAFE, DURABLE.

Fire, Lightning, Wind, Water and Rust Proof

**Suitable for Houses, Stores, Barns, Factories, Mills,
Rinks, Sheds, Cotton Gins, Sugar Houses, Etc.**

Largely in use throughout the U. S. and Great Britain.

Does not get out of order. Every Roof Satisfactory.

No complaints. Used on Sheeting Boards or Lath.

The only sheet and cap combined elastic joint, made by a simple system, by snugly folding the edges and fastenings into firm standing seams, which conform to inequalities securing more uniform tension than can be produced by any other plan of construction and never become loose.

IT IS THE MOST PERFECT AND RELIABLE PLAN IN USE.

MADE OF EXTRA CHARCOAL IRON, FREE FROM SCALE, SHEET STEEL AND PATENT CALAMINED IRON.

Goods guaranteed as represented.

The best is the cheapest.

Tools loaned to apply with. Printed instructions furnished.

Can be laid by any ordinary mechanic. All tinners agree that this plan is the best in use.

Special cash prices given for large orders on application.

Read the references and testimonials. Samples showing plan and quality mailed at request.

Send for samples and compare quality and plan of construction with others.

THE H. W. SMITH PATENT
→IRON ROOFING←
IS OUR SPECIALTY.

We keep it in stock for prompt shipment. (Other kinds made to special order only.)

This plan makes the nicest and most perfect Iron Roof that can be produced. It forms its own capping for ridge and hip seams, and can be attached to either iron or tin valleys and gutters in the roof.

SIZE OF SHEETS. 28x96 inches, and painted on both sides. Covering width 25 inches, when formed.

GUAGE 26: which is the best to use, as heavier guages cannot be folded into tight seams..

WEIGHT about 80 lbs. per square of 100 square feet.

The durability does not depend on the thickness of iron, but on quality and the paint, which is the protection. The Gauge, quality and plan are shown by our sample, to which we invite your practical judgment and comparison with other styles. Our iron is *extra charcoal, box annealed, soft, pliable and free from scale, and holds paint more tenaciously than any other material*. It is all made specially for this Roofing, at one mill, which for 12 years has made a specialty of this quality and makes better Roofing Iron than we can find elsewhere; common iron would not stand the test of our plan of folding *with the fiber of the iron*. We also make this roofing of soft Sheet Steel and Patent Calaminated Iron. Our aim is to sell the best quality and plan of Iron on the market.

→ It is a mistake often made to suppose all iron roofing alike and equally good; there is as much difference in quality of iron as in any other goods.

Some plans of construction are very objectionable and will not stand the test of years. Such roofs only do harm to the fast growing business of Iron Roofing.

Iron can generally be tested by bending with your fingers holding it close to your ear; if it bends with a cracking sensation or sound, the quality is not good enough for roofing, and contains scale (though hidden by the paint and looks all right) the scales in time will blister and peal off, leaving the iron bare. Our iron is clean and free from scale, the edges are trimmed by squaring shears, and thoroughly painted by machine, which fills all pores and produces a uniform coating far superior to hand painting.

THE PAINT USED is pure boiled linseed oil, mixed with our IRON ORK PAINT, which we believe is the *best in the world for the purpose*, it being in perfect affinity with iron or metal of any kind; the paint sticks tenaciously and becomes hard and will not crack nor rub off.

PAINTING CALAMINED IRON. We paint, form, and ship the *Calaminied Roofing, and Sheet Steel Roofing*, in the same manner as the charcoal iron, unless otherwise ordered.

We solder the crosslocks on the Calaminied Iron only when so ordered, and paint or not paint, as the customer orders. The object in painting it, is to have paint on the inside of seams when formed, to make them water tight; for very flat roofs the cross seams may be soldered if preferred, though we regard the paint as reliable as the solder.

For calaminied gutter or valley strips, we solder the cross-seams, but do not paint; before attaching the roof strips, the side fold of the gutter strip should be painted.

TO AVOID MISTAKES, customers should order *soldered, or not soldered, and painted, or not painted*, as desired.

HOW PUT UP FOR SHIPPING. 6 or 7 sheets are connected at ends by folded and grooved flat seams or cross-locks, which are water tight and far better than when made on the roof with nothing solid to mallet on, as is the case with all roofs that are laid one sheet at a time. The advantage of having the cross seams ready-made, and the strips long enough to reach from ridge to eave, is far greater than having the side edges ready turned on separate sheets, and the cross-seams not ready made; the strips thus formed are rolled up and wrapped in heavy paper secured by wire to protect from injury in shipping.

Each roll contains about one square, (100 sq. ft.) We charge for the actual length of strip, multiplied by the covering width, 2 1-12 feet or 25 inches, from center to center of standing seams when formed; (the strips being 28 inches wide before seaming,) hence a strip 48 feet long by 2 1-12 feet wide, = 100 square feet or one square, as sold by us, and the same as sold by all other manufacturers of Iron Roofing.

HOW TO ORDER THIS ROOFING. Examine the diagram for the Smith Roofing, making the necessary allowances for edges, ridge seams, flashings, etc., and you will make no mistake in the amount needed.

We cut to length only when so ordered and exact lengths specified.

FASTENINGS. We always send 40 fastenings (cleats) per square, all of which should be used; they should be nailed 12 or 15 inches apart along the one inch edge and folded into the standing seams as directed in our Instruction Sheet sent with the sample.

NAILS AND PAINT. We send nails and dry iron ore paint for final coat, except to parties furnishing themselves.

TOOLS. This roofing cannot be rightly and rapidly applied without using our tools, made specially for this purpose. We always send tools (except to agents having a set of their own.) We charge nothing for their use if promptly returned, but always charge estimated cost for return expense; they must be returned as soon as the job is laid, with our return card attached showing who returned them; also, the freight receipt must be sent us by mail to enable us to trace them if they get lost.

LATH OR SHEETING. It can be laid on lath from 3 to 6 inches apart, or on sheeting boards or over a shingle roof, as preferred. For flat roofs, sheeting boards should always be used.

WHEN TO USE FELT AND DEAFENING PAPER. When used over gas or steam, with no floor between the roof and steam, or where there is heat next to the roof, as in grist mills, one ply of rosin sized felt or deafening paper should be laid under the iron to prevent moisture from condensation of air in cold weather. This will also prevent vibration and rattling during storms.

DEAFENING FELT should be used under the iron over audience rooms having no ceilings under the roof; it is also used under carpets and between floors, especially for skating rinks, to prevent noise.

SHEATHING PAPERS also are very much used between the siding and ceiling in both brick and frame buildings for warmth and to prevent dampness.

~~As~~—We keep in stock Dry Rosin Sized Sheathing, Straw-board Sheathing, Deafening and Slaters' Felt.

THE PITCH should not be less than $\frac{1}{2}$ inch fall to the foot and more is better for any kind of roof.

GUTTERS AND VALLEYS. For gutters and valleys in either iron, tin or slate roofs, the calaminized iron is the best material to use. It can be soldered more strongly than other material, and will last as long as any roof. Our charcoal iron has never failed for this purpose, but the calaminized iron is better.

WATER PROOF. No complaints of leaking have ever been reported to us, which we consider the best evidence. Can this be said of other roofs?

HEALTHY WATER. There is nothing injurious in the paint. Its smooth surface holds but little dust, which disappears with a few minutes rain, after which the water is clear and healthy.

KEEPING IN REPAIR can be cheaply done by simply using our iron-clad cement wherever needed. Should a hole occur by accident, the cement can be used as readily as putty and makes a permanent repair. In laying roofs, it is used on flashings and in folds which join valleys and gutters to the roof.

LIGHTNING PROOF. This assertion is not used merely as an advertising hobby, *but given as a fact*. *Lightning has never been known to injure a building covered with an iron roof*, which is conclusive proof. Prof. Mitchell says: "Combustion cannot occur, as the large metallic surface scatters the electricity and renders it harmless;" hence *all danger from lightning and the expense of lightning rods is saved*.

WHY BETTER THAN SEPARATE CAPS. Because more waterproof, our folded edge on only one side of the standing seams better resist capillary attraction of water than single edges used on other plans.

Separate Caps cannot be made to conform snugly to the joints, if the surface is in the least uneven, without causing the edges to bulge or buckle, and in time become loose and the whole roof endangered. These objections are overcome by our plan of solid and firm cap and sheet combined seams.

~~As~~ Ridge and Hip Seams are more easily and better made by our plan. No separate roll or ridge cap being required.

HOW LONG WILL IRON ROOFING LAST, has ceased to be asked where this roofing is known. We know of iron roofs in use 47 years and still in good condition. We furnish better iron roofs now than were ever made before, and for less money. *Iron without scales will never shed paint.* The paint on the under side is not exposed and can never wear off so long as the outside is properly protected with paint it will last, even if it be 100 years. It should be repainted every 3 to 5 years, according to circumstances. This will incur an expense of only about 15 cents per square for material, which any one can apply with a brush.

COMPARED WITH TIN. Iron Roofing can be applied more rapidly and on a cheaper surface. It is stronger. Has fewer seams. The joints are elastic and *never injured by contraction and expansion.* The tension is more uniform and is less liable to get out of order. It can be more cheaply repaired by anyone. Iron joints contain paint on inside, which acts as a cement and prevents leaking. Tin joints are from 5 to 20 times as many and have no paint on the inside, and being rigid with solder and the material weaker, often break from vibration and contraction.

Tinned or leaded roofing plates for the American market are of inferior and cheaper quality.

TIN IS MADE OF SHEET IRON dipped in a powerful acid, then in a solution of tin or lead which is all run off by electric process except 2 to 4 per cent. which is not enough to hold solder strongly. Many small cavities and pores, though generally imperceptable to the eye, are not coated, and when exposed to the atmosphere will corrode more quickly than iron never dipped in acid. "A machine is not stronger than the weakest part." *The iron is the base in both and the paint is the protection of both;* hence the iron, possessing all the above advantages, is the safest to use.

Tin roofs are usually allowed to rust a few weeks to take the paint better, and then painted, *this being an additional charge of 50 cents per square.* Iron is already painted and never allowed to commence to corrode, and the final coat is included in the price of completing the roof.

— In Great Britain, where all the tin is made, iron is used generally, and tin plates but little. Iron roofing plates appear on English metal quotations. *Tin roofs become leaky 10 times as often as iron roofs;* these facts outweigh any theory as to tin. "Truly not all that glitters is gold."

COMPARED WITH SLATE. Slate requires a heavy and expensive structure to bear its weight, and must be steep, which makes more surface to cover. Weighs from 5 to 7 times as much, often breaks from shrinkage of the timbers, freezing, thawing, and heat of adjacent fires, and blows off. In many States firemen are not required by law to go on a slate roof, (for obvious reasons.) Cannot be walked over while repairing gutters, chimneys, lightning rods, etc., and are not lightning proof. Driving storms force snow and rain through the roof.

It holds more heat in summer and more cold in winter. When gutters are flooded with ice and snow, it will leak, and is very costly to repair; in any event, metallic gutters are always required for the more dangerous parts.

COMPARED WITH SHINGLES.

The greater number of fires originate on the roof. The average life of a shingle roof is only 10 years in town and 12 in the country. Shingles years ago were made of prime timber, but are now made of soft trees, saplings, limbs and odd cuttings, because prime timber brings higher prices for other purposes.

Shingles are dangerous, and fast growing in disfavor. Iron costs about the same, can be laid much faster, will last many times longer, looks richer and better, and is safe against fire and lightning.

INSURANCE.

is one-third cheaper where an iron roof is used.

INSURANCE REDUCED. Wm. Raedel, Esq., Waynesburg, Ohio, says: "My insurance was reduced from \$31 to \$19 after getting your roofing. The money saved would more than pay for painting every year, if necessary. I have painted it only once in five years."

SHEETS OF EXTRA LENGTH furnished on short notice up to 10 feet, without cross seams, for flat porches, verandas and other special purposes.

SHEET STEEL ROOFING.

Our manufacturer has at last triumphed in reducing the carbon enough in sheet steel, to make it sufficiently pliable for our plan of roofing.

The Steel is fine and strong and stands the test of folding one way as well as the other, as it really has no grain or fiber; any one doubting its being steel can quickly test it by bending between the fingers, if it bends every way alike it is steel.

Its superiority and value for roofing needs no argument. We do not as yet keep Steel roofing in stock, but make it to order on short notice.

PATENT CALAMINED IRON

Patent Calaminized Iron is an improvement on galvanized iron. The Calamine is a non-corrosive combination of metals, which penetrates the pores, becoming homogeneous with the iron, hence the body of the iron is made impervious to dampness; it also makes the iron more pliable. It is put twice through the hot Calamine dip, which gives it a coating superior to all others, and is guaranteed not to crack nor scale under any test. It solders stronger than any other material, with either rosin or acid.

We handle two grades of Calaminized Iron. The roofing quality is our standard charcoal iron, calaminized.

~~A~~ The other grade is Best Bloom, (B. B.) which we sell in bundles for tinners' double seaming and stamping purposes. The body in Best Bloom is nearer steel than iron. Prices are about the same as for galvanized iron, and the weight less per square foot by a few ounces.

~~A~~ We keep in stock guages 24, 26, 27 and 28, in the standard sizes. Other sizes made to order on short notice.

~~A~~ We guarantee this iron satisfactory, if not so, return and we will refund all money paid.

~~A~~ AGENTS FOR ROOFING should adopt the best plan and quality, to give best satisfaction, build up a large trade, and baffle competition.

IRON ORE PAINT.

WE GUARANTEE OUR IRON ORE PAINT EQUAL IN ALL RESPECTS TO ANY OTHER FIRE PROOF PAINT IN THE WORLD, AND TO SPREAD FARTHER THAN ANY OTHER.

It never cracks, scales nor fades, does not run in streaks nor settle in the bucket, and is the cheapest and best to use on iron, tin, wood or brick.

The color is a beautiful dark red, makes a purple brown when mixed with lamp black, or pink, when mixed with white lead. Seven lbs. of our paint mixed in one gallon boiled oil, spreads a good coat over 10 to 12 squares of sheet iron; this is more than can be claimed for any other.

We CHALLENGE ANY OTHER TO DO AS MUCH. It is all re-ground and takes less oil. (which is the principal cost) than any other paint in the market.

The saving in oil will more than pay for the paint. ANY ONE CAN MIX AND APPLY THE PAINT.

WE GUARANTEE THE ABOVE CLAIMS.

If not satisfactory, return at our expense and we will refund all money paid.

GIVE IT A TRIAL.

Size of packages, dry, 100, 300, 500 and 600 lbs.

PAINT GROUND IN OIL, medium brown and standard dark brown. In barrels 1000 and 800 lbs., kegs 100 and 50 lbs., cans 25 and 12½ lbs.

Requires one-half as much oil to mix as the dry paint.

All customers are well pleased with our paint and cement.

No complaints—which is better proof than a thousand testimonials.

Sample sent by mail on application.

ROOFING CEMENT.

WE GUARANTEE OUR ELASTIC CEMENT THE BEST IN THE MARKET.

It has stood the test more than 50 years, and is the cheapest and most reliable material in use for flashings on iron, tin and slate roofs; it stops all leaks and will never crack nor peel.

Tinners will find it superior to solder. In boxes, 6½ and 12½ lbs., cases 100 lbs. (8 or 16 boxes.)

A trial will prove its merits. If not satisfactory return at our expense and we will refund money paid and ask no questions.

COST OF LABOR IN APPLYING THIS ROOFING.

50 cents per square is about the average cost, though all depends on the wages paid, and the size and shape of the roof. Labor will cost, in most cases, from \$1.25 to \$2.00 per day for carpenters, ordinary mechanics and intelligent workhands. Good tinners in many places charge from \$1.50 to \$2.50 per day. 4 to 5 squares is about the average amount for a days work, though very much depends on the experience and skill of the men employed. On large and plain jobs, 10 squares a day to each man, has been laid. On very steep roofs, small roofs, or where there are many gutters, valleys, chimneys, scuttle holes, ventilators, etc., to be flashed, the roof will be laid slower accordingly; hence, the price varies from 20 cents to 75 cents per square, according to the above named circumstances.

TO ASCERTAIN THE TOTAL COST PER SQUARE OF FINISHED ROOF.

Add to our quotations on the goods and freight, the probable cost of labor, and one-sixth gallon linseed oil, (to mix the paint) and you will know the total cost of this roofing, which we believe to be the best and cheapest in the World, protection and durability being considered.

Have no fears to send us your orders, as we GUARANTEE THE GOODS SATISFACTORY.

COMPARATIVE COST OF VARIOUS ROOFS, DURING THE LIFETIME OF EACH, ESTIMATED ON A COMPOUND INTEREST BASIS.

For economy and good financeering in roofs, the following facts and figures will be useful:

Forty years is the average life of buildings until destroyed by fire, or replaced with new ones.

At 8 per cent. compound interest, money doubles in 9 years and 2 days.

At 10 per cent. compound interest, money doubles in 7 years and 100 days.

AVERAGE DURABILITY OF ROOFS MOST USED.

Slate.....	60 years	Tin, painted.....	20 years
Calamined Iron.....	60 "	Shingles.....	12 "
Charcoal Iron.....	40 "	Paper Coated.....	5 "
Corrugated Iron, (common) painted.....			20 "

We estimate repairs equal on all, though they are less on good iron during its full lifetime than for the other kinds.

SLATE. 60 YEARS. (estimated to 40 years,) costs about \$1.50 per square (100 sq. ft.) more than the Charcoal Iron. in addition to the greater surface and costlier timbers required for its use, and then it is not lightning proof, and is fire-proof only against sparks, but not against great heat.

This extra \$1.50 per square, at 8 per cent. compound interest in 9 years, amounts to \$3.00; in 18 years, \$6.00; in 27 years, \$12.00; in 36 years, \$24.00; and at 40 years, to \$32.65 per square more than Charcoal Iron Roof, (the amount of slate in 60 years, at this rate, would be \$152.28.)

Calamined Iron Roof will last fully as long as Slate, costs about the same, but the repairs are less.

TIN ROOFS, 20 YEARS. Tin roof costs about \$1.00 per square more than Iron, and being weaker and rigid with solder, it becomes useless sooner.

This \$1.00 per square extra, at 8 per cent. compound interest, in 9 years amounts to \$2.00; in 18 years, to \$4.00; and at 20 years, to \$4.67 per square more than a Charcoal Iron Roof; this \$4.67 at compound interest for 20 years more, (the average lifetime of Charcoal Roof being 40 years) would make the amount \$21.78 per square more than for Charcoal Iron; a new roof is supplied at 20 years, the cost of which, at compound interest on the average price of tin roof, amounts to over \$25.00 per square for the last 20 years; add to this the \$1.00 at compound interest for the first roof for 40 years, and the total cost amounts to nearly \$50.00 per square more than for one Charcoal Iron Roof, to last the whole 40 years.

SHINGLES, 12 YEARS. $3\frac{1}{3}$ shingle roofs for the 40 years; the first roof would cost about the same as the Charcoal Iron Roof.

Add to this the cost of a new roof, at 12 years, at compound interest for the remaining 28 years, and the cost of another roof at 24 years, at compound interest for 16 years, and another roof at 36 years, at compound interest for the remaining 4 years, and the entire cost for 40 years, is nearly $13\frac{1}{2}$ times more than for the Charcoal Iron, (less a credit of 8 years on the last shingle roof, the time until it would be worn out.)

Shingles are neither fire nor lightning proof, and the insurance is $\frac{1}{3}$ higher, which would more than paint the iron roof every 3 years.

PAPER ROOFING, 5 YEARS. 8 Paper Roofs to last 40 years; the cost and compound interest on each of the last 7 roofs, from the time put on up to 40 years, would amount to 43 times more than one Charcoal Iron Roof for the same time.

From the above it will be seen that a good Iron Roof is far the cheapest to use.

REFERENCES.

C. Aultman & Co., Canton, O.....	Mfrs. Machines
T. H. Ray & Co., Providence, R. I.....	Contractors
Paducah Lumber Co., Paducah, Ky.....	Lumber Dealers
C. A. & C. R. R., Mt. Vernon, O.....	
Nichols, Shepard & Co., Battle Creek, Mich...	Mfrs. Machines
R. W. Wood, Winnemucca, Nev.....	Hardware and Stoves
Jacob Sherffius, Winona, Minn	Stoves and Tin
T. B. Anderson, Norfolk, Va.....	Flour Mill
Diebold Safe and Lock Co., Canton, O.....	Mfrs. Safes
Colessier Bros., Eldorado, Pa.....	Mfrs. Mill Picks, &c
E. M. Beach, Franklin, Neb.....	Contractor
Mattoon Gas Light Co., Mattoon, Ill.....	
E. Shisler, Morgantown, W. Va.....	Hardware
S. H. & E. J. Stearns, Tower City, Dak.....	Hardware
Wilkinson & Fore, Alma, N. C.....	Lumber Dealers
A. G. England & Co., Lonoke, Ark.....	General Store
P. F. Ball & Bro., Bel Air, Md.....	Hardware
J. H. Meredith, Washington, Ind.....	Contractor
Gregg & Co., Trumansburg, N. Y.....	Mfrs. Machines
A. H. Krouskop, Richland Centre, Wis.....	General Store
G. M. Scott & Co., Salt Lake City, Utah.....	Hardware
Crown Cotton Mills, Dalton, Ga.....	Mfrs. Cotton Goods
Fred. Scholle, Belen, New Mexico.....	General Store
P. H. Haltewanger, Columbus, S. C.....	Grocer
Vulcan Furnace Co., Detroit, Mich.....	
C. Bilger, Clinton, La.....	General Store
Geo. Horridge & Co., Vinton, Iowa.....	Hardware
J. J. Phillips, Cannonsburgh, Pa.....	Contractor
N. Y. & N. E. R. R., Boston, Mass.....	
Chas. Schreiner, Kerrville, Tex.....	General Store
Wrought Iron Bridge Co., Canton, O.....	Mfrs. Bridges
Sweetwater Milling Co., Sweetwater, Tenn.....	Flour Mills
Hysinger & Graham, Meredosia, Ill.....	General Store
Nichols Bros., Petersboro, N. H.....	Stoves and Tin
Geo. W. Stockwell, Greenville, Miss.....	Stoves and Tin
Taylor Hardware Co., Taylor, Tex.....	Hardware
Worth & Patterson, Warwick, Kan.....	Contractors
G. B. Brewster & Sons, Addison, N. Y.....	Hardware
Burrell & Whitman, Trenton, Mich.....	Factory
Brown, Manley Plow Co., Malta, O.....	Mfrs. Plows
Gracy & Marchbanks, Sparta, Tenn.....	Lumber and Mill
C. C. Hagemeyer & Co., Butler, Ky..	Saw Mill and Flour Mill

TESTIMONIALS.

T. C. SNYDER & Co.:—Send 50 squares Iron Roofing with cleats and paint. Your seam is pronounced the *best in this section.* **D. A. TILLEY**, Builder, Hyde Park, N. Y.

T. C. SNYDER & Co.:—I have put on my roofing and I think it the best roof in the neighborhood. Everyone that has seen it thinks it a nice roof and ahead of tin. There are several of my neighbors want to get the roofing.

J. HOMRIGHOUSE, Royalton, O.

T. C. SNYDER & Co.:—Being old tinners we were never in favor of iron roofing, until we saw your plan of construction and material. It gives entire satisfaction. People are taking it in preference to any other. The tools you sold us put it on rapidly, tightly and with uniform tension, thereby preventing vibration, which is not the case with other metallic roofs. We don't talk tin roofs to our customers any more, as we are satisfied we can give them better value for their money.

MILLER BROTHERS, Creston, O.

T. C. SNYDER & Co.:—Our Iron Roof is on in good shape and is perfectly satisfactory.

HILTON BROS., Fremont, Newago Co., Mich.

T. C. SNYDER & Co.:—We have had a good deal of experience in iron roofing, but not until we began to use yours have we been able to give entire satisfaction to our customers. We roofed the W. & C. R. R. Depot here with it, and a tin roof put on an adjoining building at the same time, is now leaking; while your roof is perfect. We were given the contract on account of the superiority of your iron and the perfect elastic joint made in your mode of putting on—which is done speedily and does away with the objectionable separate caps and rivets. We think it far superior to tin or any other kind of iron roofing in the market.

WOOD & ATKINSON, Builders, Weston, W. Va.

T. C. SNYDER & Co.:—I have examined metallic roofing manufactured by other parties and applied in various ways, and believe your method of putting together is the best.

H. M. BLOSER, Bloserville, Pa.

T. C. SNYDER & Co.:—Within the past eight years we have covered more than 50 buildings with your H. W. Smith Patent Roofing, and all jobs so far give good satisfaction.

T. H. RAY & CO., Providence, R. I.

T. C. SNYDER & Co.:—I consider your roofing cheaper and better than tin. It is much more convenient to use. The rapidity with which it is laid is a strong point in its favor.

J. D. BARKER, Girard, Kan.

T. C. SNYDER & Co.:—All parties using your roofing are well pleased, and pronounce it the best roof they ever saw. Its superiority over other iron roofs no one can deny.

RUSSELL, SMITH & CO., Lake Benton, Minn.

T. C. SNYDER & Co.:—We take pleasure in saying your H. W. Smith Patent Iron Roofing is easily put on and is substantial; gives satisfaction and has a very handsome appearance.

KENESAW MILLS CO., Marietta, Ga.

T. C. SNYDER & Co.:—We have been using your Iron Roofing for about eight years, and are pleased to say that it has given perfect satisfaction in every instance.

M. H. HEIL & CO., Delta, O.

T. C. SNYDER & Co.:—Your Patent Iron roofing put on our Hardware Store eight years ago has never leaked and seems to be as good as ever. We consider it an excellent roof.

W. A. STRAYER & CO., Canton, O.

T. C. SNYDER & Co.:—The roof is on all right and the parties are well pleased. I like it much better than roofing with caps, and several have said the same thing. It makes a very handsome roof. I will send you another order before long.

T. W. REYNOLDS, Berrien Springs, Mich.

T. C. SNYDER & Co.:—Have your Roofing on two of our warehouses, 75x100: are much pleased with it so far; see no reason why it should not be an excellent roof.

D. M. OSBOURNE & CO., Auburn, N. Y.

T. C. SNYDER & Co.:—We have put your roofing on the Grand Trunk Railroad Freight Depot, over 200 squares. They are well pleased with it. We think it the best iron roofing we ever saw.

G. H. PETERS & SON, Buffalo, N. Y.

FOR BARN ROOFS.

T. C. SNYDER & Co.:—Gentlemen: Your H. W. Smith Patent Iron Roofing, which I put on my barn eight years ago, appears to be as good as the day it was put on, and I believe will last 50 years, if kept painted. Its being lightning proof, saves the expense of rodding.

ALBERT TRICKER, Mentor, Ind.

FORTY-SEVEN YEARS.

T. C. SNYDER.:—The Iron Roofing on my old bank building, “which you have just examined,” was put on in 1838. It has never leaked to my recollection; it has been painted but a few times, and still seems to be sound as ever.

BERNARD KINNEY, Ravenna, O.

Martin Helman, New Lisbon, O., had a sheet-iron roof that lasted 43 years, while two tin roofs, on other parts of the same building, wore out in the same time.

Many others can be named if necessary, that have lasted a long time, but we deem the forgoing sufficient.

ABOUT CALAMINED IRON.

T C. SNYDER & Co.:—I am well pleased with your Iron Roofing and the *Calaminied Iron is the best material I ever worked it solders better* than tin, and being so soft is easily bent to any shaped gutter. My first job was a good test for it, as there were many mitres and angles to fit. I think you have a grand thing, as it must soon take the place of galvanized iron for cornice work and many other things now made of galvanized iron. I want the agency in Wahoo for this iron.

W. H. BARNES, Wahoo, Neb.

CALAMINED IRON.

T. C. SNYDER & Co.:—The Calaminied Iron worked well and I like it better than galvanized iron. It is heavy enough for roofing and solders well.

CHAS. L. FELDWEG, Clay City, Ill

What Customers Say of Our Paint.

It is the best as well as the cheapest paint we have ever used or seen.

Cleveland Wrought Iron Fence Works, Cleveland, O.

T. C. SNYDER & Co.:—Gentlemen—Your “Metallic Paint” is the best we have ever used.

Wrought Iron Bridge Co., Canton, O., per M. Adler, Supt.

T. C. SNYDER & Co.:—Dear Sirs—Your “Metallic Paint” spreads well and makes a better coating on tin than venetian red, or any other paint I ever used. It does not run on the tin and leave streaks; it sticks tighter and does not settle as much as other kinds. E. J. Rex, Tinner, Canton, O.

We are especially pleased with it and will continue the use of it.

G. C. Reed, Ass't Gen'l Manager, L. & N. R. R.

Our foreman painter reports your paint to be the best he has ever used.

G. R. Carr, Gen'l Sup't C. H. V. & T. R. R.

It has given us entire satisfaction, and we are now using it exclusively on cars and similar work.

B. F. Fields, Master Painter. }
J. W. Sawyer, Master Car-Builder. } N. C. & St. L. R. R.

I shall use it on all my turbine wheels, as I think it superior to any other. T. J. Wilder.

We have adopted its use permanently for painting our engines, as we think it superior to any other.

Erie City Iron Works, Erie, Pa.

We find it of superior quality, and shall use it on all our railroad bridges and other iron work.

Wilkins, Post & Co., Atlanta, Ga.

In grinding we find it takes from 10 to 25 per cent. less oil than various other brands of oxide of iron we have heretofore handled. Peaslee, Gaulbert & Co., Louisville, Ky.

We think it superior to any in the market, and shall soon want another car load. Milburn Wagon Co., Toledo, O.

We have hundreds of letters similar to the above.

AGENCIES.

An agent for our goods means simply an exclusive customer for the territory assigned him, all inquiries from said territory thereafter are referred to him, which protects him in the sale of our goods. He buys the goods from us at such times and in such quantities as he desires and makes his own selling prices to his customers. *We furnish no goods on commission.*

We charge nothing for territory, except to require him to buy tools within three months, otherwise the agency will be considered abandoned and revoked at our option. When he buys tools we send him certificate of agency, which he may hold so long as he buys not less than \$100.00 worth of goods each year. If he should afterwards wish to quit the agency we will take the tools back at cost, less \$10.00 a year.

AGENTS MAY ALSO SELL IN ANY OTHER TERRITORY NOT TAKEN. We furnish free of charge poster cards and circulars, printed specially for agents use, with their name printed thereon, also electrotypes, if desired.

Parties not desiring to buy tools may sell our goods so long as they return our tools according to our rules, but until they buy tools, we do not protect them by referring inquiries to them.

Where we have no agent, we sell direct to the consumer, and at same prices.

TERMS.

Small orders from transient customers must be accompanied with the cash.

Goods shipped on cash quotations, *must be paid for on delivery.*

Parties known to be responsible and prompt, may have 30 days, if desired.

Remittances must be made by N. Y. Draft or P. O. Order, *and not by personal check.*

Telegrams, Exchange and Express Charges must be pre-paid.

Accounts not remitted when due, subject to sight draft. No extensions allowed except on bankable note, with interest at 8 per cent.

OUR PRICES.

Are always as low as any good iron roofing can be afforded. We pay no heed to roofs of defective plans and inferior quality. We advise you against buying such. Our goods are cheaper in the end. Compare our samples with others. Awaiting your orders. Respectfully Yours,

T. C SNYDER & CO.

TO AGENTS.

HOW TO SUCCEED.

“A word to the wise is sufficient.”

“Every man is the moulder of his own fortune.”

Good management and the practice of good business principles leads to success.

Bad management leads to failure, and will ruin any business.

To succeed in selling Iron Roofing: First, adopt the quality and plan of construction of roof that makes the best job when completed.

Second, be businesslike, honorable, energetic, prompt and thorough.

Third, practice good management both for your own economy and your customer's benefit.

Fourth, make yourself fully competent in all you undertake.

Read the circular and instructions carefully, make your business known, buy a set of tools and put yourself in shape for business with necessary facilities, and thereby save all return charges which in time would amount to more than the cost.

One return charge, if it be but \$1.00, (which is below the average return expense) at 8 per cent. compound interest, in 100 years amounts to \$2048.00; at 10 per cent. in 100 years, \$13809.00. Some parties pay several return charges every year, rather than invest in tools. Such financeering is very bad management for agents, though good for any party buying but one job.

HOW TO MAKE PROMPT COLLECTIONS.

Allow no cause for complaint nor delay of payment.

Make your contracts definite and plain to all concerned.

Present your bills promptly when due, and in a bold and respectful manner, showing that you expect the bill to be honored at sight.

Make no excuses for asking for your money, and don't appear timid nor embarrassed.

You have a right to your pay when due. If you are negligent about collecting you will be the more likely to be put off when you do ask. Don't think you must furnish customers with capital by giving more time than you can afford; don't be afraid to say no.

Collect prompt and pay promptly, even if you have to borrow the money.

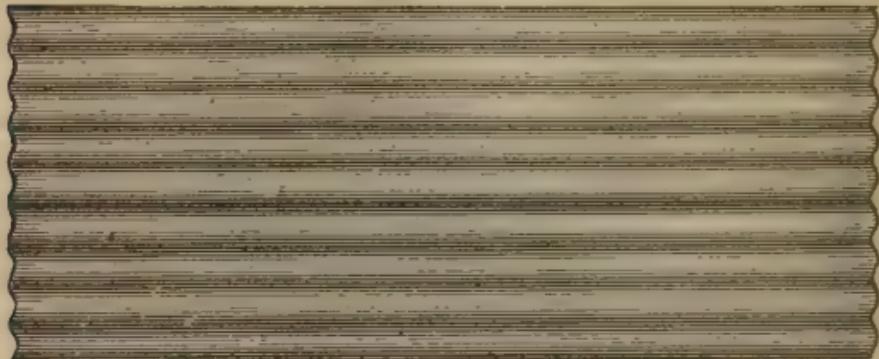
CORRUGATED IRON.

OUR CORRUGATED, CRIMPED EDGE AND BEADED *Siding and Ceiling* is made of refined iron, box annealed and free from scale; also of Sheet Steel, Galvanized and Calamined Iron, as desired. The Corrugated and Crimped are also used for roofing. We always paint the black iron and steel unless otherwise ordered.

We make these to order on short notice. The joints are simply laps and not locks or seams; these kinds make cheap, handsome and durable fire-proof siding and ceiling.

But for roofs we recommend the SMITH PATENT, even on iron sided buildings, it being more secure against leaking, as the joints are locks instead of laps.

The heavier gauges No. 20 and 22 may be laid on rafters, but it is better in most cases to use the lighter gauges on lath or sheeting boards.



Corrugated Sheet of Iron.

The Standard Size of Corrugates is $2\frac{1}{2}$ inches from center to center, by $\frac{5}{8}$ to $\frac{3}{4}$ inch deep, and $1\frac{1}{4} \times \frac{3}{8}$ inch. Standard length of sheets is 96 inches, but can be made any length up to 10 feet, or when not annealed, $12\frac{1}{2}$ feet.

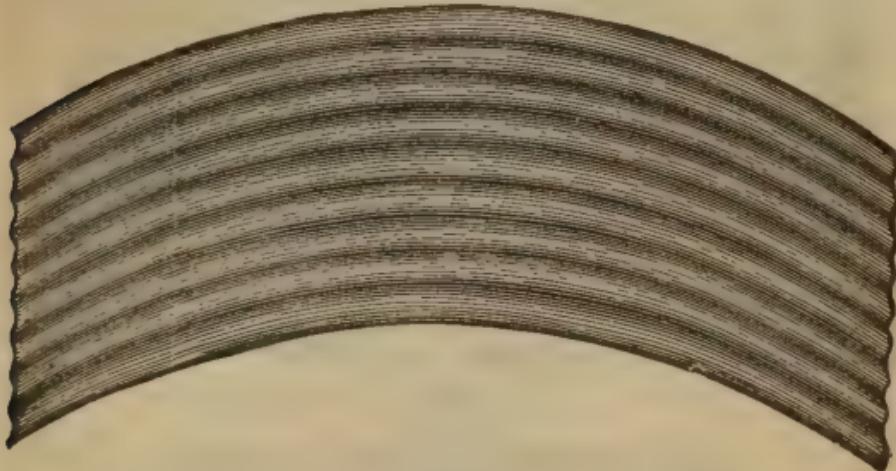
The Covering Widths are $23\frac{1}{2}$, 24, 26 and 30 inches, as desired; $23\frac{1}{2}$ is most used.

We can also furnish Corrugations $\frac{5}{8}$, 1, 2, 3 and 5 inches wide, but the standard size $2\frac{1}{2}$ inches is used generally.

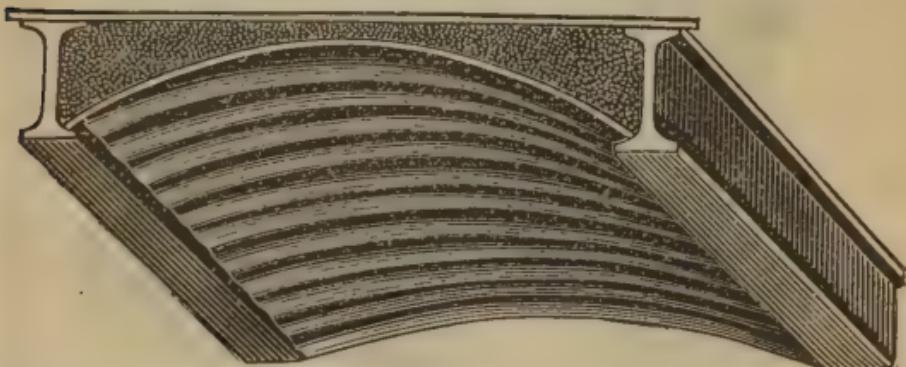
The smaller corrugations are used more on the lighter guages, and 3 and 5 inch corrugations mostly on heavier guages.

••• In shipping we always make allowance for the side lap, without extra charge, but make no allowance for end laps, which vary from 2 to 6 inches on roofing, and 1 to 3 inches on siding, as the customer desires. We furnish barbed wire-nails for all corrugated and crimped roofing and siding.

••• In ordering make allowance for such laps as you wish to use, and estimate such length of sheets as will cover the surface to the best advantage, and not require unnecessary cutting; also fill out the diagram, so we may see that your estimate is correct.

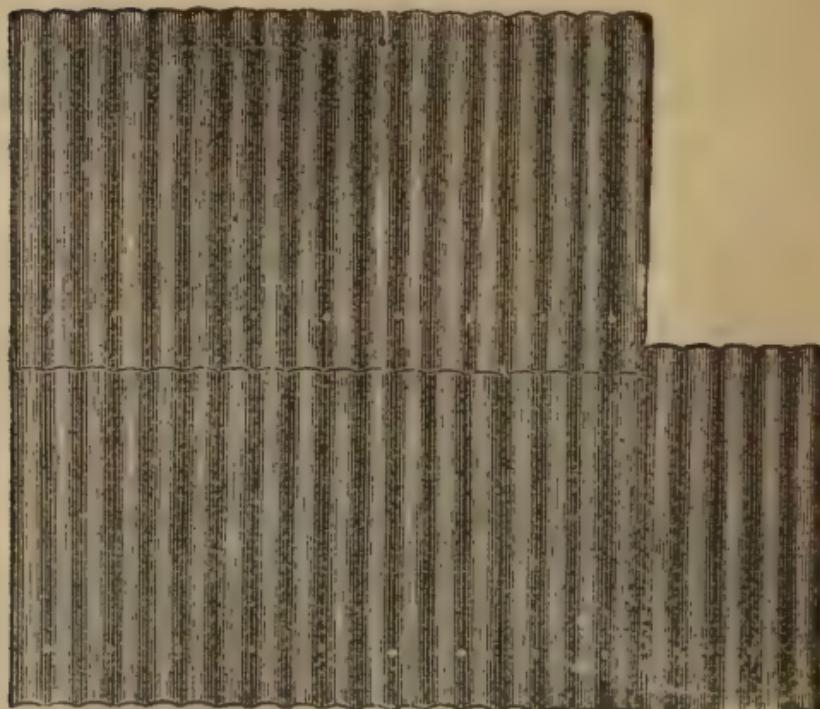


Curved to any required radius, for Roofs and Ceilings.



Curved, as applied on iron floor beams for ceilings in fire proof buildings.

CORRUGATED SIDING FOR GRAIN ELEVATORS.



Sheets, when corrugated, $2\frac{1}{2}$ inches from center to center of corrugate, and $1\frac{1}{4} \times \frac{3}{8}$ inches, cover $23\frac{1}{2}$ by 30 inches.



Building covered with our Smith Roofing and Corrugated Siding, part of which is on Sheathing and part on Studding.



Crimped Roofing and Siding.

Sheets cover 24 inches from center to center of crimps, and can be furnished any length up to 8 feet, with or without locks on the ends. Where applied on rafters without sheeting, nail through the lap into the cross piece between the rafters. Where applied on sheeting use the lock. This makes a cheap, durable, fire proof material for roofing and siding. May be applied on rafters, studding or sheeting, and is used largely on Blast Furnaces, Rolling Mills, etc.

We furnish triangular wood strips to use under the crimps.



Ridge Cap for Corrugated and Crimped roof, to be nailed or riveted to place.

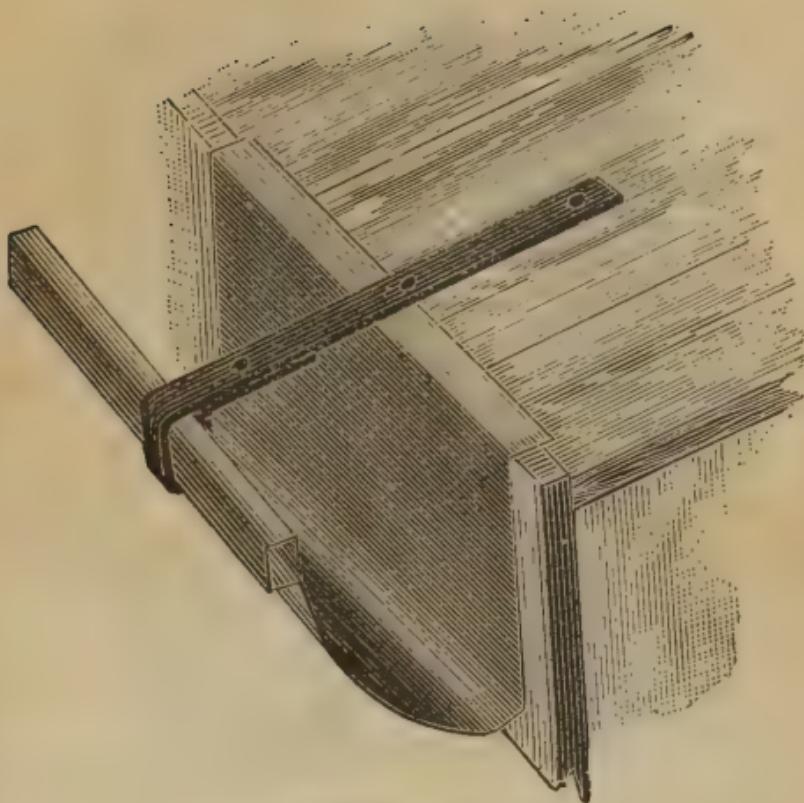
BEADED CEILING AND SIDING.



The Nicest and Cheapest Design

Sheets lay 24 by 48 inches, but can be furnished any length up to 8 feet. Beads 3 inches from center to center, $\frac{3}{8}$ inch wide, $\frac{1}{8}$ to 3-16 inch deep. For Siding it can be applied on sheathing boards, or directly to studding placed either 16 or 24 inches from centers. As a ceiling it can be applied directly to the floor joists, making a *light, elegant and cheap fire-proof Ceiling*; is painted both sides; after laying, the outside surface can be painted any desired color. We furnish Wire Barb Nails for both Siding and Ceiling.

Our $\frac{5}{8} \times \frac{1}{8}$ corrugated also makes beautiful Siding and Ceiling, and is often preferred to any other.



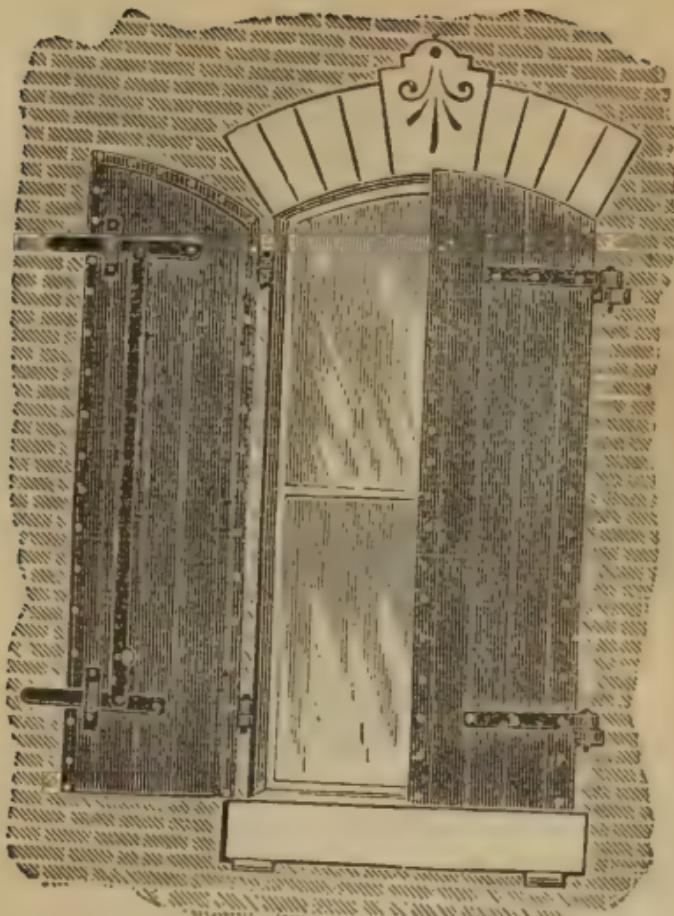
Flat back hanging gutter, made of Calamined Iron.

This cut shows design of our Hanging Gutter, with Iron Strap Fastener. We guarantee this the best and strongest in the market. We furnish three sizes in 7 foot lengths.

No. 24—8x8 inches, 26 inch Girt.

No. 24—6x6 inches, 24 inch Girt.

No. 26— 15 inch Girt.



Fire-Proof Doors and Shutters.

The above cut shows our style of Shutter, with fastenings. The body is made of wood and covered on each side with our Bead Iron, which projects an inch at top and sides, and is riveted every three inches. Experience has proven that Shutters and Doors constructed in this manner stand extreme heat better than solid iron. In ordering send exact size of openings and shape of arch.

PRICE LIST.

THE H. W. SMITH PATENT.

Charcoal Refined Iron, Box Annealed, Standard Gauge,	
Painted.....	\$4.00 per square, (100 sq ft)
Sheet Steel, Standard Gauge.....	4.75 "
Calamined Iron, " painted	5.90 "

Prices include our style roofing nails, also cleats, dry paint for final coat, and use of tools.

CORRUGATED ROOFING AND SIDING.

MADE TO ORDER.

Refined Iron, box annealed, painted, \$3.75 per square (100 sq ft)	
Calamined.....	5.75 "
Galvanized.....	— "

Size Corrugates, $2\frac{1}{2} \times \frac{5}{8}$ inches.

CRIMPED ROOFING AND SIDING.

MADE TO ORDER.

Common Iron, box annealed, painted, \$3.60 per square (100 sq ft)

CORRUGATED CEILING AND SIDING.

MADE TO ORDER.

Refined Iron, box annealed, painted, \$3.75 per square (100 sq ft)
Corrugates, $1\frac{1}{4} \times \frac{5}{8}$ or $\frac{5}{8} \times \frac{1}{8}$.

BEADED IRON CEILING AND SIDING.

Charcoal Iron, box annealed, painted, \$3.75 per square (100 sq ft)

Suitable sizes wire barbed nails, and one corrugate for side lap included in all corrugated, crimped and beaded goods, without extra charge. No allowance for end laps.

VALLEYS AND GUTTERS — IN PLAIN STRIPS.

Charcoal Refined Iron, Box Annealed, painted..... $3\frac{1}{2}$ c sq. ft.
Calamined Iron, Cross Seams locked and soldered .. $5\frac{1}{2}$ c sq. ft.

Prices for Calamined Iron, in bundles, for tinner's stamping purposes, quoted on application.

HANGING GUTTER.—CALAMINED IRON.

No. 24—8x8 inside, 26 inch girt, per lineal foot.....	35c
“ 24—6x6 “ 24 “ “ “	30c
“ 26— “ 15 “ “ “	20c

ROOFING NAILS.

Our Pattern, 1½ for iron and tin, ½ kegs, 50 lbs.....	\$2.75
“ “ “ “ “ kegs, 100 lbs.....	5.00
Wire Barbed, large head, kegs.....	9.00
“ “ “ per pound.....	.10

ROOFERS' AND BUILDERS' PAPERS.

Roofers' Felt, Light.....	25 cts. per square (100 sq. ft.)
“ “ Medium.....	35 “ “ “
“ “ Heavy.....	50 “ “ “
Patent Waterproof Sheathing,	35 “ “ “
Red Rosin Sized	35 “ “ “
Plain Board	35 “ “ “
Deafening Felt, Dry.....	35 “ “ “

ROOFING CEMENT.

In Boxes, 6¼ and 12½ lbs.....	10 cts. per lb
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IRON ORE PAINT. DRY.

Kegs, 100 lbs.....	2 cts. per lb
Barrels, 300, 500 and 600 lbs.....	1½ “
Half Ton lots	1¼ “

Ton and Car load lots, special prices on application.

PAINT GROUND IN OIL.

MEDIUM BROWN AND STANDARD DARK BROWN.

Barrels.....	4 cts. per lb
Kegs, 50 and 100 lbs.....	4½ “
Cans, 25 lbs.....	5 “
Cans, 12½ lbs.....	6 “

Special prices given for large orders.

Prompt attention given to all orders.

FACTS FOR BUILDERS.

1000 shingles, laid 4 inches to the weather, will cover 100 square feet of surface, and 5 lbs. of shingle nails will fasten them on.

One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching.

1000 laths will cover 70 yards of surface, and 11 lbs. of lathe nails will nail them on. 8 bushels of good lime, 16 bushels of sand, and 1 bushel of hair, will make enough good mortar to plaster 100 square yards.

A cord of stone, 3 bushels of lime, and a cubic yard of sand, will lay 100 cubic feet of wall.

5 courses of brick will lay 1 foot in height on a chimney, 6 bricks in a course will make a flue 4 in. wide and 12 in. long, and 8 bricks in a course will make a flue 8 in. wide, and 16 in. long.

Cement 1 bush. and sand 2 bush. will cover $3\frac{1}{2}$ sq. yds. 1 in. thick, $4\frac{1}{2}$ sq. yds. $\frac{3}{4}$ in. thick, and $6\frac{3}{4}$ sq. yds. $\frac{1}{2}$ in. thick. 1 bush. cement and 1 of sand will cover $2\frac{1}{4}$ sq. yds. 1 in. thick, 3 sq. yds., $\frac{3}{4}$ in. thick, and $4\frac{1}{2}$ sq. yds., $\frac{1}{2}$ in. thick.

CAPACITY OF CISTERNS.

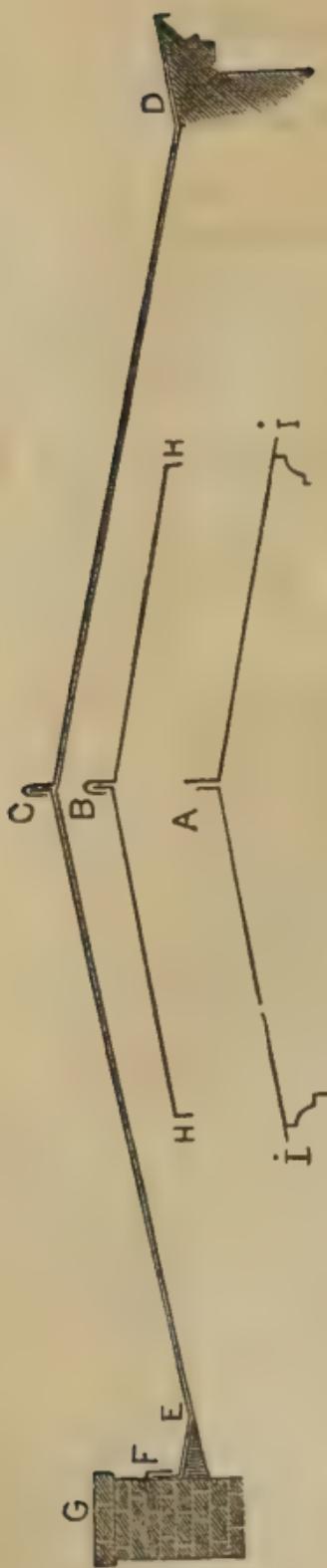
In calculating the capacity of cisterns, $3\frac{1}{2}$ gallons are estimated to one barrel, and 63 gallons to one hogshead.

CIRCULAR CISTERN ONE FOOT IN DEPTH.

Five feet in diameter holds	$4\frac{1}{2}$ barrels
Six feet in diameter holds	$6\frac{3}{4}$ barrels
Seven feet in diameter holds	9 barrels
Eight feet in diameter holds	12 barrels
Nine feet in diameter holds	15 barrels
Ten feet in diameter holds	$18\frac{1}{2}$ barrels

SQUARE CISTERN ONE FOOT IN DEPTH.

Five feet by Five feet holds	6 barrels
Six feet by Six feet holds	$8\frac{1}{2}$ barrels
Seven feet by Seven feet holds	$11\frac{1}{2}$ barrels
Eight feet by Eight feet holds	$15\frac{1}{4}$ barrels
Nine feet by Nine feet holds	$19\frac{1}{2}$ barrels
Ten feet by ten feet holds	$23\frac{3}{4}$ barrels



CUT No. 5.

A.—Shows the 1 inch and a two inch edge turned up at ridge.

B.—Shows the 2 inch edge bent over the 1 inch edge.

C.—Shows the comb seam finished.

D.—Shows a gutter in the roof.

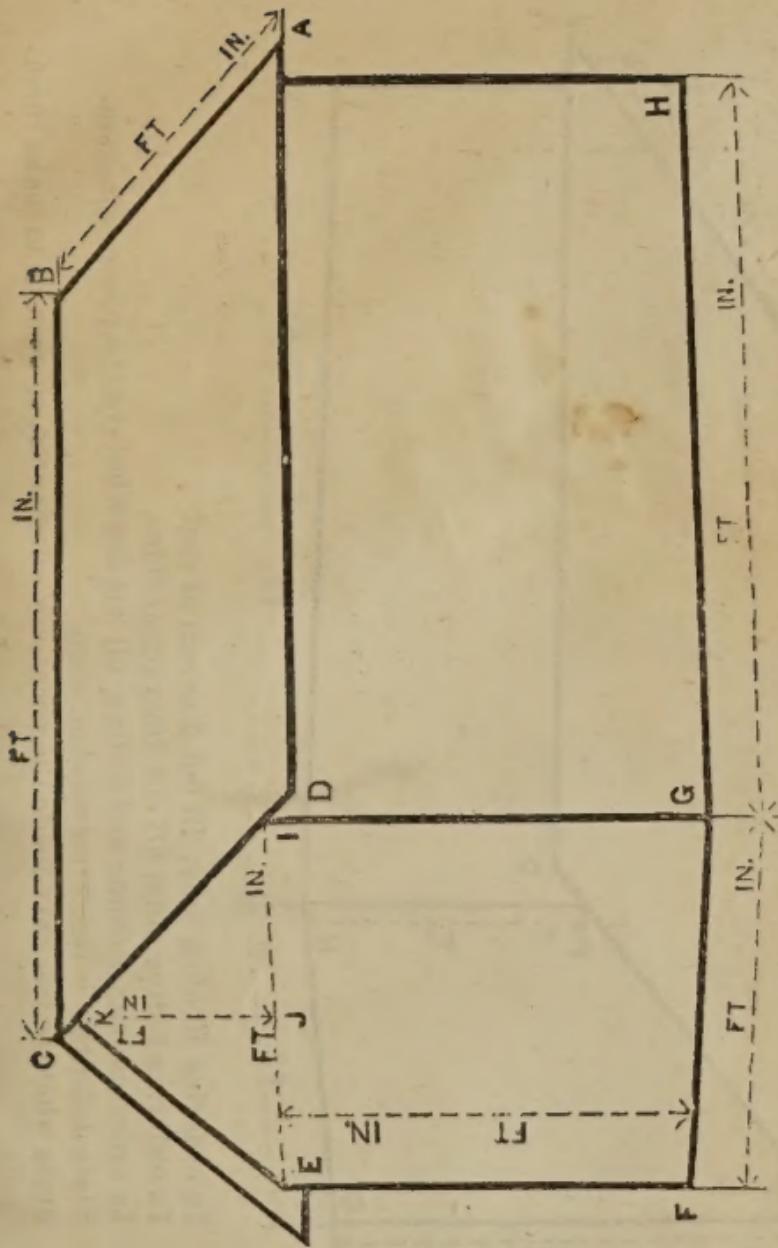
E.—Shows a gutter along the fire wall.

F.—Shows counter flashing on fire wall.

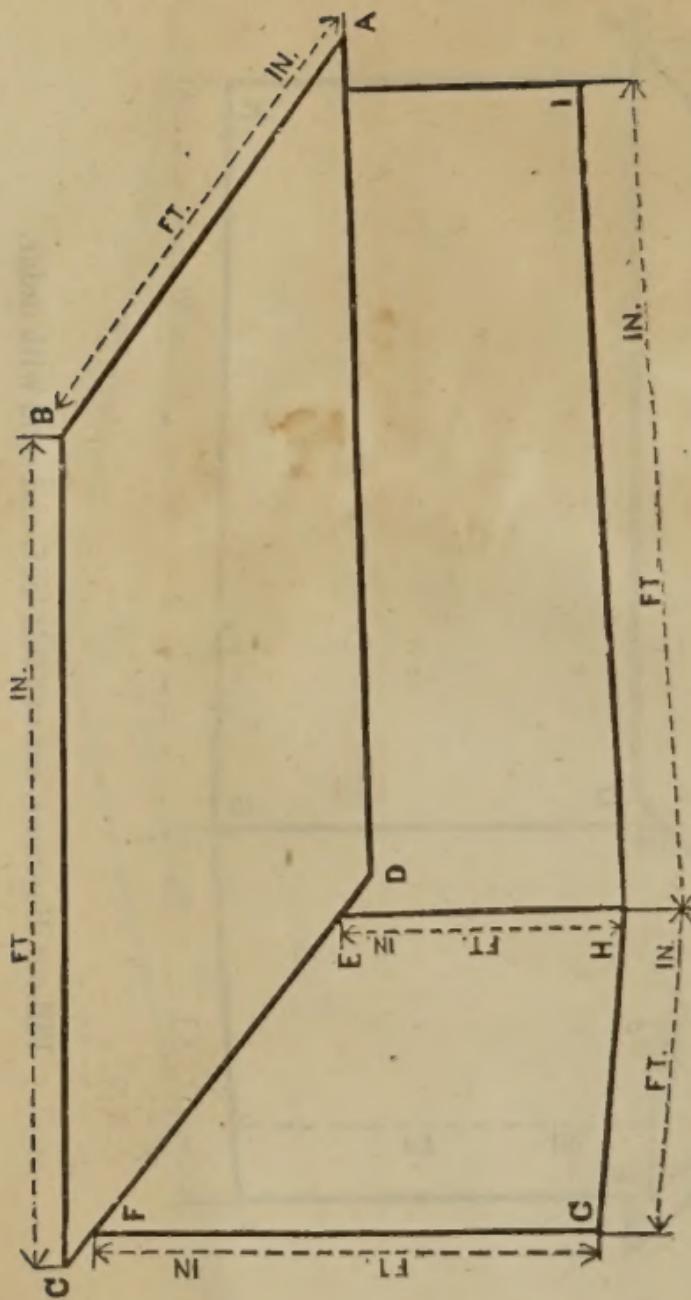
G.—Shows brick fire wall.

H.—Shows laps at eaves.

I.—Shows drip at eave, not turned down.



Fill out diagrams, cut out this leaf, and send with order.



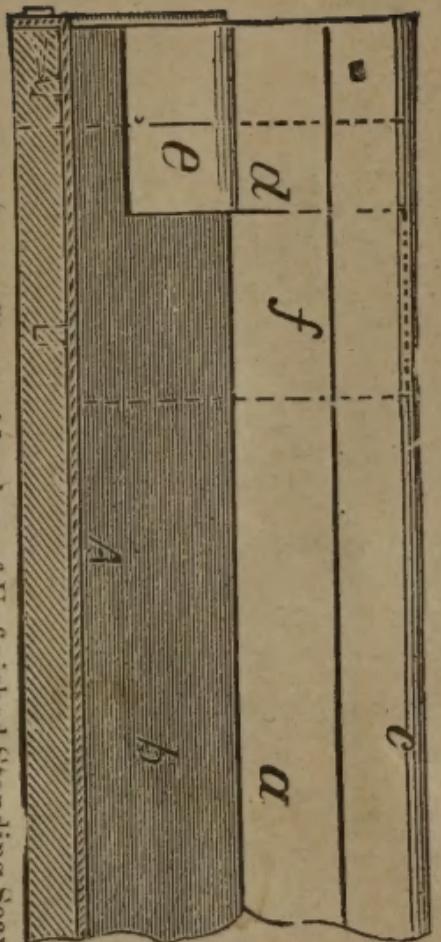
In ordering Roofing only, fill out diagram of roof.

In ordering Siding only, fill out diagram of sides.

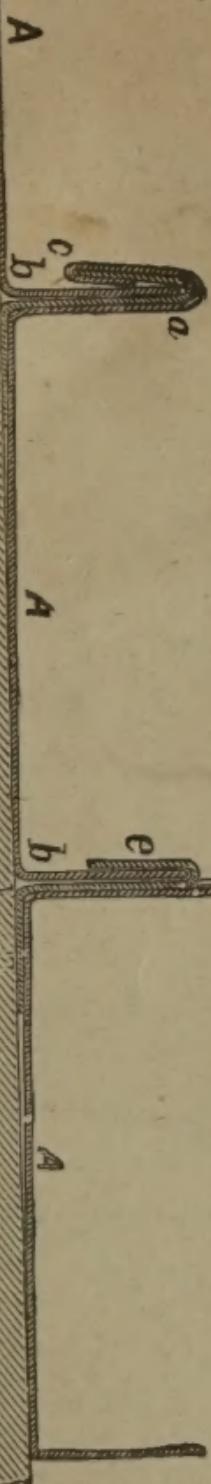
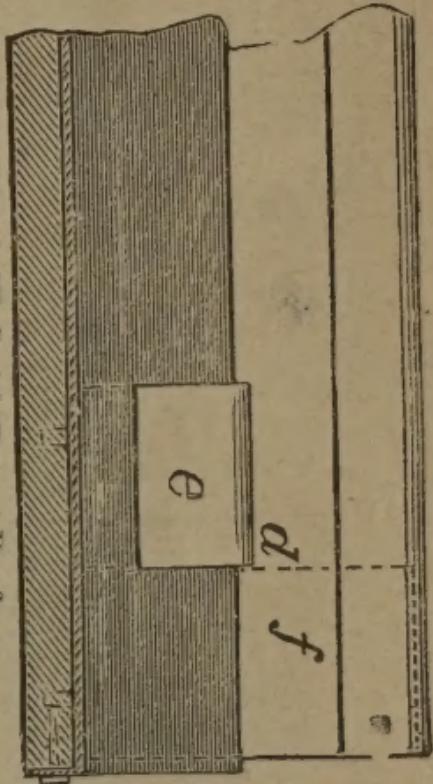
In ordering both Roofing and Siding, fill out the whole of the proper diagram.

State definitely which kind we shall send.

State whether you have made the necessary allowances, or wish us to make them.



Cut No. 2.—Shows side view of Unfinished Standing Seam or Joint, of the H. W. Smith Patent Roofing.

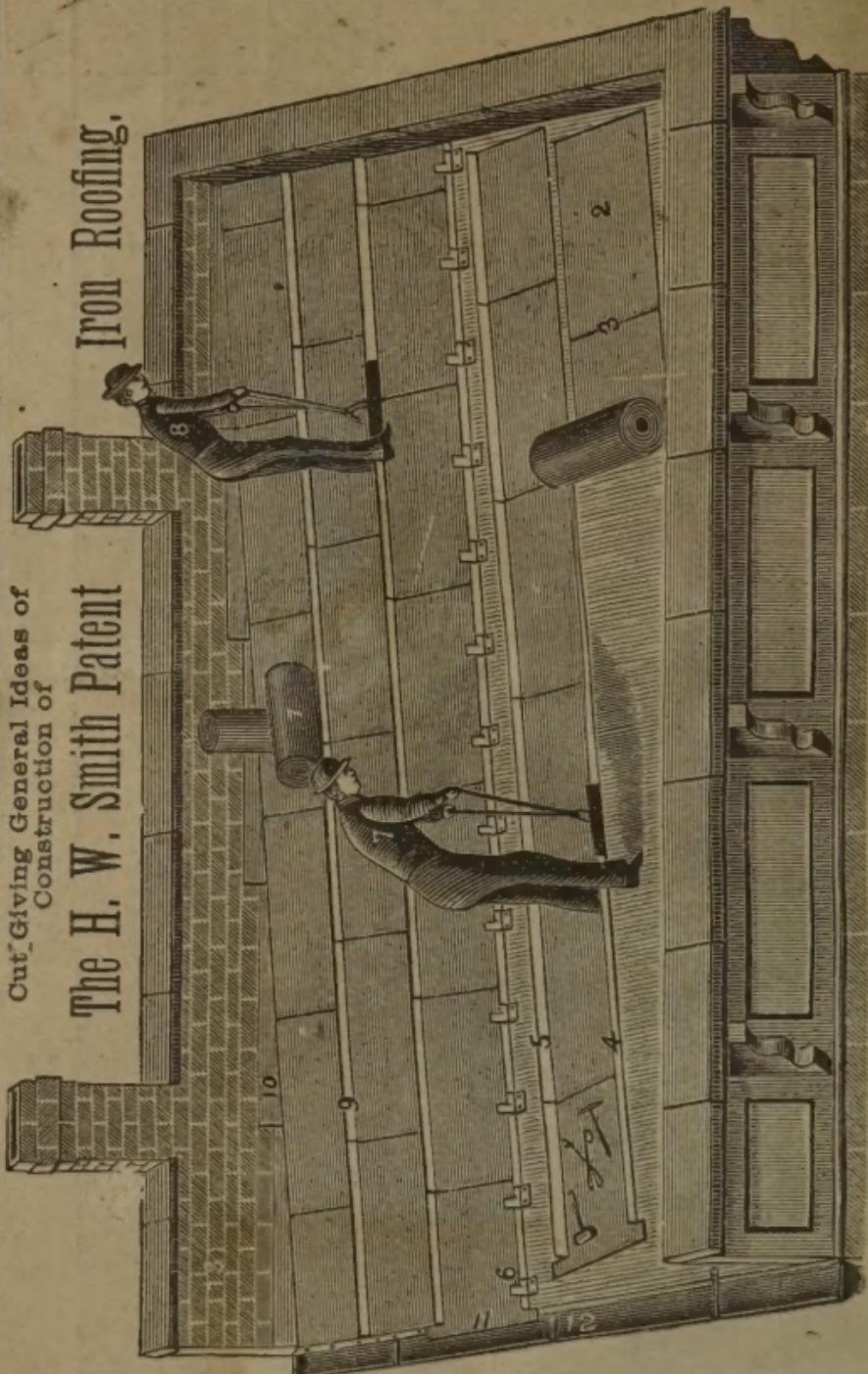


Cut No. 3.—End views of Unfinished and Finished Standing Seam or Joint, of the H. W. Smith Patent Roofing.

Cut Giving General Ideas of
Construction of

The H. W. Smith Patent

Iron Roofing.



EXPLANATIONS TO THE CUT.—1, The Roofing in Rolls. 2, The Roofing as Unrolled. 3, Cross-lock or Flat Seam. 4, 1-inch Edge Turned Up. 5, $2\frac{1}{4}$ inch Edge Turned Up. 6, Cleats or Fastenings. 7, Man Turning Edges with Tongs. 8, Man Folding Edges with Seamers. 9, Finished Seam or Standing Joint. 10, Flashing along the Fire Wall. 11, Lap to turn Down at Eaves and Gable Edges. 12, Eave Trough or Hanging Gutter.